PATENT APPLICATION SERIAL NO.

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

330 GL 12/02/96 0B747873 1 201 436.00 CK

Megens

Reissue of Patent No. 5,042,103

Granted: August 27, 1991

"MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY"

Assistant Commissioner for Patents Washington, D.C. 20231

Express Mail mailing label number TB73663919X

Date of Deposit: September 22, 1995

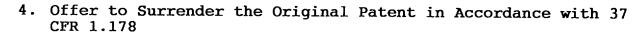
I, Mary A. Jelinek, hereby certify that this paper or fee is being deposited with the U.S. Postal Service Express Mail Post Office to Addressee' service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

REISSUE APPLICATION TRANSMITTAL

Sir:

Transmitted herewith is the application for reissue of U.S. *Patent No. 5,042,103, issued on August 27, 1991, to Johannes A. Megens, and titled MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY.

- Specification, Claim(s) and Drawings(s)
 - 4 page(s) of specification (a) Х
 - 7 page(s) of claims X
 - 1 page(s) of abstract
 - No changes in the drawings upon which the original Х patent was issued are to be made. Therefore, in accordance with 37 CFR 1.174, please find attached, in the size required for original drawings:
 - X a copy of the printed drawings of the patent.
- Declaration and Power of Attorney
 - by Assignee since reissue application does not seek to X enlarge the scope of the claims of the original patent.
- Assent of Assignee to Reissue Under 37 C.F.R. \$1.172
 - Х attached



X attached

5. Original Patent

X Declaration that original letters patent lost or inaccessible attached

6. Title

In accordance with 37 CFR 1.171 this application for reissue is accompanied by

X an order for an abstract of title

7. Information Disclosure Statement

X attached Form 1449

8. Priority - 35 U.S.C. 119

- X Priority of application Serial No. 8900557 filed on March 7, 1989 in Netherlands is claimed under 35 U.S.C. 119.
- X The certified copy has been filed in prior application serial no. 487,892 filed on March, 1990, U.S. Patent No. 5,042,103.

9. Fee Calculation (37 CFR 1.16(h), (i) and (j)

ia E	CLAIM	IS AS FILED	
Number Filed	Number Extra	Rate	Basic Fee (37 CFR 1.16(h) \$730.00
Total Claims (37 CFR 1.16(j))	24 - 20 (and also in excess of total claims in patent)	4 X \$22.00	88 .00
Independent Claims (37 CFR 1.16(i))	5 - 1	4 X \$76.00	304 .00

Filing Fee Calculation

\$ 1,122.00

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10. Small Entity Status

X A verified statement that this filing is by a small entity is attached.

Filing Fee Calculation (50% of above) \$561.00

11. Method Of Payment of Fees

Enclosed is a check in the amount of \$586.00, combining the fee for an abstract of title and the filing fee.

12. Authorization To Charge Additional Fees

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 13-3080.

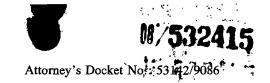
Respectfully submitted

Kevin P. Moran Reg. No. 37,193

File No. 53142/9086

Michael, Best & Friedrich 100 East Wisconsin Avenue Milwaukee, WI 53202 (414) 271-6560 Applicant or Patentee: Johannes A. Megens

Serial or Patent No.: 5,042,103 Filed or Issued: August 27, 1991



MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY"

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9 (f) and 1.27(c)) - SMALL BUSINESS CONCERN

I hereby declare that I am

1 1	tne	owner	OI.	the small	ousiness	concern	identified	below:
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[X] an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: ADDRESS OF CONCERN:

Kelley Company, Inc. 6720 N. Teutonia Avenue Milwaukee, WI 53209

I hereby declare that the above identified small business concern qualified as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliate, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled "MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY" by inventor(s) Johannes A. Megens described in

[X] the reissue specification filed herewith.	
Application Serial No.	, filed
[X] Patent No. 5,042,103, issued August 27,	991.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

*NOTES: Separate verified statements are required from each named person, concern

		having rights to the invention averring		
FULL NAME: ADDRESS:				
	[] INDIVIDUAL	[] SMALL BUSINESS CONCERN	[] NONPROFIT ORGANIZATION	
FULL NAME: ADDRESS:				
	[] INDIVIDUAL	[] SMALL BUSINESS CONCERN	[] NONPROFIT ORGANIZATION	

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

ľ	NAME	OF	PERSON	SIGNING:	

ADDRESS OF PERSON SIGNING:

Lawrence E. Johnson

TITLE OF PERSON OTHER THAN OWNER:

President

Kelley Company, Inc., 6720 N. Teutonia Avenue, Milwaukee, WI 53209

SIGNATURE

DATE 9/13/95



MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY

The present invention relates to a bridge for making a connection between a loading platform and a vehicle, wherein the bridge is hingedly connected to the platform, and wherein the height at the side of the vehicle is variable.

Such loading bridges are generally known. Often these loading bridges are driven for their vertical movement through a hydraulic apparatus. In such devices cylinder is provided between a fixed point and a point of the bridge, so that the loading bridge can be moved in the vertical direction and can even be locked.

Also loading bridges are known, which are operated by hand, and which rest at the movable side on the loading floor of the vehicle.

All these known loading bridges have a number of disadvantages; manually operated loading bridges can only be applied until a certain weight, as otherwise they become too heavy and cannot be moved by human

Big loading budges, which often comprise a hydraulic drive, have the disadvantage, that these hydraulic apparatus are rather costly, so that the price of such loading bridges is substantial. The same disadvantage does also exist when the loading bridge is driven by in electric motor and a rack and pinion.

The present invention tries to provide such a loading bridge, which can be provided with a driving medianism for relatively modest cost, despite substantial dimensions.

This aim is achieved, in that under the bridge a fierible body has been provided of which the volume increases when it is filled with a gas.

As the price of such as flexible body is modest, and the filling thereof requires only equipment, of which the price is low, a rising mechanism for such a bridge is provided, which can be manufactured against mocest costs. Thus the cost of such a loading bridge are decreased considerably. In this respect the remark is made, that the bridge only has to be lifted in its unloaded condition; hence there is no need for substantial power, so that relatively light and simple pneumatic apparatus is satisfactory.

Subsequently the present invention will be elucidated with the help of the accompanying drawings, wherein: FIG. 1: is a schematic perspective view of a closed

loading platform comprising a loading bridge; FIG. 2: is a schematic exploded view of a first embodiment of a loading bridge according to the present invention;

FIG. 3: is a schematic cross-sectional view of the first embodiment of a loading bridge according to the pres-

FIG. 4: is a schematic perspective view of a second embodiment of a loading bridge according to the present invention;

FIG. 5: is a cross-sectional view of an alternative embodiment for the controlling mechanism of the E- of the loading bridge according to the present invention;

FIG 6: is a perspective view partially broken away of a third embodiment of the present invention, and

FIG. 7: is a cross-sectional view, partially as a side view of the embodiment depicted in FIG. 6.

The loading platform 1 depicted in FIG. 1 comprises a pit 2, in which a loading bridge 3 has been provided. In the present case the loading platform 1 is covered, i.e. that a wall 4 has been provided, wherein a roll down 5 shutter 5 has been provided at the location of the load-

ing bridge 3.

A vehicle to be loaded, for instance a lorry, drives with its rear side as close as possible against the loading platform 1, wherein the rear side of the lorry hits the 10 buffer 6. Then the roll down shutter 5 is moved upwardly, and the height of the loading bridge 3 is adapted to the height of the rear side of the lorry, so that (this can be loaded easily. It is convenient to drive into the lorry from the loading platform with for in-

stance fork lifts.

FIG. 2 shows an exploded view of such a loading bridge according to the present invention. The loading bridge comprises a housing, which is composed of two fixed sides 7, which have been folded zigzag-wise, and also a rear wall 8. The rear wall comprises reinforcement pieces 9, which are mutually connected through bars 10. When providing such a loading bridge in a loading platform, the loading bridge is located as a whole on the right spot after which the loading platform is formed in concrete. Thus the sides 7, the rear wall 8, the reinforcement pieces 9 and the bars 10 function as a lost formwork.

hate the housing thus obtained a base 11 is provided. 30 which comprises a substantially horizontal part 12 and a part 13 extending obliquely downward to the front. Also the bottom comprises a front wall 14 extending obliquely upwardly. The loading bridge per se comprises a movable plate 15, which is manufactured of steel or aluminum; and to the lower side thereof reinforcement ribs 16 have been welded Further a round rod 17 has been welded to the under side of the plate 15, which rests in an array of substantially L-shaped hooks 18 welded against the back wall & Finally a filling 40 piece 19 has been welded against the lower side of the plate 15, which filling piece 19 can be magufactured from a steel box or may be composed of rather light material, like tempex.

At the lower side of the plate 15 a lid 21 has been

45 hingedly connected by means of hinges 20.

In the space between the falling piece 19 and the oblique part 13 of the bottom, a flexible bag or bellows 22 has been provided, which may be manufactured from for instance polyethylene. The form of this bag is such 50 that it fits in the space thus provided. Further this bag comprises a connection 23, which fits into a hole 24 provided in the bottom. Through this connection a gas, for instance air can be supplied, and which can fill the bag 22, so that the bridge 15 is rasied thereby.

The cross-sectional view shown in FIG. 3 shows how the bag 22 is tocked up in the space between the olique part 13 of the bottom and the filling piece 19. The bag may be connected with the lower side of the filling piece by for instance adhesive or buttons. Further it is 60 shown how a ventilator 26 can blow up the bag 22 through a tube 25 against the spring pressure of a oneway valve 27. Further a valve 28 with pressure dependent action has been provided in the tube, which lets a part of the air flow out when the pressure in the bag 65 becomes too high, so that the loading bridge under a changing load, for instance the driving on and off a fork

lifter, does not suddenly jump upwardly. Instead of a ventilator, a compressor with a venturi can be used.

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Further in the drawing it is shown how the vehicle list 29 can be moved from a lorry 30 until under the space under the apparatus, so that it does not interfere the loading and unloading. To avoid wear of the bag during the movement, the front wall 14 thereof is, formed such, that the bag wall rolls off or on, when moving the loading bridge. The same seature has been applied with the side walls; the wall of the bag rolls as a membrane on or off against the side wall 19. Besides these side walls 19 serve to protect the bag, 22 in the highest position of the loading bridge.

Further it is shown in this figure how the lid 21, which is connnected with the bridge 15 by means of a hinge 20, is provided of a rod mechanism 31, that provides for the fact, that the lid 21 is usually in its inward position, whereas when reaching the highest position of the loading bridge the rod mechanism forces the lid upwardly, so that this is in the position shown with drawn lines in the figure after which the loading bridge -> " may descend until the position, in which this connects on the loading floor of the lorry 30, and rests on the frame of the lorry or on the loading floor thereof. The lid 21 is kept in this position by a cam 32 welded thereon by a folded rod 33, which is connected with the loading bridge 15 by means of a hinge 34, and a rod 35 connected hingedly with the other side thereof, which rod comprises a thickening 36 at its lower side. Further this rod 35 extends through an apetture in the front plate 14.

When reaching the upper position of the loading bridge, the thickening 36 in the rod 35 exerts a force to the folded rod 33, so that this rod moves the lid 21 to its extended position. This position is maintained by the

cam 32 when moving downwardly.

In FIG. 4 another embodiment of the loading bridge is shown, in which another plate 15 of the loading bridge, a network of thin metal strips 36 have been provided, so that a honeycomb-like structure develops. This results in a lighter construction of the reinforcement of the loading bridge, which may considerably reduce the sosts thereof. This construction is only allowed because the forces of the loading bridge are borne by the whole underside thereof, so that the construction for the concentrating of the forces to one point, which was necessary when using a hydraulic driver is superfluous. This has of course a very favorable outworking on the price Further this loading bridge comprises a rod system 37 and a spring 38, which also provides that during the descending only of the loading bridge the lid 21 is in its extended position. Further the bag can be made so large, that is pushes directly against the lower side of the bridge and makes the filling piece superfluous.

In this embodiment, a front skirt 52 and side skirts 53 are provided extending downwardly form the underside of the bridge. When the bag is deflated, it is folded within the front and side skirts, and the front skirt is adjacent the front wall 14. As the bag is inflated, side portions of the bag are played out off of the skirts onto the front wall and the side walls of the bousing.

This is further elucidated with the help of FIG. 5. When moving upwardly, the compression spring 38 will urge the rod system 37 outwardly, which is avoided by the cam 39. When the bridge has reached its highes, position, the chain 40 will pull the rod system 37 downwardly and outwardly, so that the lid 21 is urged to its extended position. During the following the descending of the bridge, the rod system 37 will be received by a

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o T top 41, which urges the rod system and the spring 38 back to their original positions.

Of course a lot of other possibilities are available for the controlling of the lid 21.

In the embodiment of the loading bridge depicted in FIG. 6 and 7 the bag 22 has been replaced by a bellows

Besides the construction of this embodiment of the loading bridge 3 is substantially equal to the embodiment depicted in FIG. 1-3. The present embodiment is different, because no housing, in which the hag 22 is enclosed, as there is no question anymore of a bay. The only reason for nevertheless applying a full housing is the use thereof as lost formwork. This is of course also possible together with the application of a bellows.

Instead thereof a frame 43 is used, of which the plate 15 of the loading bridge is provided hingedly, in a way substantially as in the first embodiment. For bearing the load of the frame on the base two brackets 44 have been provided. Further in this embodiment the plate 15 is reinforced by spars 42. The bellows rests with its bottom on the horizontal part of the bracket 44, whereas the top thereof is connected with a plate 45, being connected with the two middle spars 42.

Further the side wall of loading bridge is composed of plates 19 which avoid, that part of the body become squeezed between the frame and the bridge.

Besides the construction of the bellow is depicted in FIG. 7. The bellows 41 comprises a bottom plate 46, 30 which is connected on the horizontal part 44 through an intermediate piece 47. The bellows per se, which is composed of a fiexible bag 48, for instance made of rubber or of plastic, is connected with the base plate 46 and a top plate 49. To avoid extension of the bag 48 in 35 the horizontal direction two rings 50 ve been provided.

Through a pipe 51 extending through the intermediate piece 47 and the base plate 46 a gas, for instance air can be supplied to make the volume of the bag 48 increase. In view of the supply of air or a gas referred is to the embodiment described with the help of FIG. 3.

Besides several features of the different embodiments can be mutually combined.

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1. Loading bridge for making a connection between a loading platform and vehicle, comprising:

a substantially planar member pivotally connected to the loading platform and capable of bearing a load, wherein a rear edge portion of said substantially planar member is hinged along a surface of the loading platform, and wherein a front edge is movable in a direction perpendicular to said surface of the loading platform; [and]

an inclined base positioned under the substantially planar member, and

pivot means for pivoting said substantially planar member, said pivot means comprising an inflatable ferible body positioned on the inclined base.

2. A loading bridge as claimed in claim 1, wherein said pivot means further comprises means for filling said inflatable flexible body with air, said means for inflating comprising a blower positioned under said inclined base.

3. A loading bridge as claimed in claim 1, wherein said flexible body is a bag made of polyethylene which engages[covers] a substantial portion of a bottom surface of the substantially planar member.

4. A loading bridge as claimed in claim 1, wherein said flexible body is a bag made of PVC which covers a substantial portion of a bottom surface of the substantially planar member.

5. A loading bridge as claimed in claim 1, further comprising:

a front skirt extending downwardly from a front portion of a bottom surface of the substantially planar member; and

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first and second side skirts extending downwardly from opposite side portions of the bottom surface of the substantially planar member[;], wherein when said flexible body is in a deflated condition said flexible body is stored between said front skirt and said first and second side skirts in a folded fashion, and wherein as said flexible body is inflated side portions of said flexible body are played out from the skirts onto a housing of the loading platform.

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- 6. A loading bridge as claimed in claim 1, wherein said flexible body is a bellows having a rigid bottom and rigid top, and wherein said rigid top is connected to a bottom surface of the substantially planar member.
- 7. A loading bridge as claimed in claim 6, wherein said bellows is a air spring.
- 8. A loading bridge as claimed in claim 1, wherein the loading platform has a recess and a housing formed in a bottom portion of said recess, wherein said substantially planar member is disposed within said recess, and wherein said flexible body is disposed within said housing.

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9. A loading bridge as claimed in claim 1, further comprising a lid hingedly connected to the front edge of said substantially planar member.

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10. A loading bridge as claimed in claim 9, wherein when said loading bridge is in a loaded condition said substantially planar member is supported on the vehicle by said lid.

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11. A loading bridge as claimed in claim 9, further comprising control means for controlling movement of said lid, wherein said lid is controlled to an upward position

during upward movement of the substantially planar member.

12. A loading bridge as claimed in claim 1, wherein said inclined base is angled upwardly and rearwardly toward the rear edge portion.

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13. Loading bridge for making a connection between a loading platform and vehicle, comprising:

a substantially planar member pivotally

a substantially planar member pivotally connected to the loading platform and capable of bearing a load, wherein a rear edge portion of said substantially planar member is hinged along a surface of the loading platform, and wherein a front edge is movable in a direction perpendicular to said surface of the loading platform;

a base positioned under said planar member;
pivot means for pivoting said substantially
planar member, said pivot means comprising an inflatable
flexible body, and

means for inflating said inflatable flexible body, said means for inflating including a blower positioned under said base.

- 14. A loading bridge as claimed in claim 13, wherein said base includes a hole for allowing communication between said inflatable flexible body and said blower.
- 15. A loading bridge as claimed in claim 13, wherein said inflatable flexible body includes an opening in a bottom portion for allowing communication with said

ventilator

16. Loading bridge for making a connection between a loading platform and vehicle, comprising:

a substantially planar member having a periphery and pivotally connected to the loading platform and capable of bearing a load, wherein a rear edge portion of said substantially planar member is hinged along a surface of the loading platform, and wherein a front edge is movable in a direction perpendicular to said surface of the loading platform;

a base positioned under said planar member; and pivot means for pivoting said substantially planar member, said pivot means comprising an inflatable flexible body, said inflatable flexible body having a periphery that is spaced inwardly from a periphery of the planar member.

17. A loading bridge as claimed in claim 16, wherein said periphery of the planar member has opposing sides and wherein said inflatable flexible body centrally positioned between opposing sides of said planar member.

18. A loading bridge as claimed in claim 16, further comprising at least <u>/one annular member</u> surrounding at least a portion of the inflatable flexible body and positioned to limit lateral expansion of said inflatable flexible body.

A loading bridge as claimed in claim 18, wherein said loading bridge includes a plurality of said nnular members.

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20. Loading bridge for making a connection between a loading platform and vehicle, comprising:

a substantially planar member pivotally connected to the loading platform and capable of bearing a load, wherein a rear edge portion of said substantially planar member is hinged along a surface of the loading platform, and wherein a front edge is movable in a direction perpendicular to said surface of the loading platform;

a base positioned under said planar member;
pivot means for pivoting said substantially
planar member, said pivot means comprising an inflatable
flexible body; and

means for detachably connecting an upper surface of said inflatable flexible body with a lower surface of said planar member.

21. A loading bridge as claimed in claim 20, wherein said means for detachably connecting includes buttons.

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22. Loading bridge for making a connection between a loading platform and vehicle, comprising:

a substantially planar member pivotally connected to the loading platform and capable of bearing a load, wherein a rear edge portion of said substantially planar member is hinged along a surface of the loading platform, and wherein a front edge is movable in a direction perpendicular to said surface of said platform;

pivot means for pivoting said substantially planar member, said pivot means comprising an inflatable flexible body; and

a lid hingedly connected to said front edge of said substantially planar member.

23. A loading bridge as claimed in claim 22, wherein when said loading bridge is in a loaded condition said substantially planar member is supported on the vehicle by said lid.

24. A loading bridge as claimed in claim 22, further comprising control means for controlling movement of said lid, wherein said lid is controlled to an upward position during upward movement of the substantially planar member.

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ABSTRACT

The invention concerns a loading bridge for making a connection between a loading platform and a vehicle, wherein the height of the bridge is variable at the side of the vehicle to allow for vehicles with different heights. A gas-operated driving mechanism is disclosed of which the costs are considerably less than prior art hydraulic driving mechanisms. Further a mechanism is disclosed for automatically controlling the movements of a lid connected with the loading bridge.

11 Claims, 4 Drawing Sheets

Reissue Application Declaration and Power of Attorney by Assignee

Lawrence E. Johnson, President of Kelley Company, Inc., declare: that I am a citizen of the United States and resident of Wisconsin; that the entire title to U.S. Patent Number 5,042,103, granted on August 27, 1991, to Johannes H. Megens is vested in Kelley Company, Inc.; that I believe said named inventor to be the original, first and sole inventor of the subject matter which is described and claimed in the aforesaid letters patent and in the foregoing specification and for which invention I solicit a reissue patent;

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.

I hereby appoint JOSEPH A. GEMIGNANI, (Reg No. 19,482), ROBERT E. CLEMENCY (Reg. No. 19,287), DAVID B. SMITH (Reg. No. 27,595), GLENN A. BUSE (Reg. No. 24,217), FRED WIVIOTT (Reg. No. 19,158), ANDREW O. RITERIS (Reg. No. 20,916), DAVID R. PRICE (Reg. No. 31,557), ROBERT S. BEISER (Reg. No. 38,687), BAYARD H. MICHAEL (Reg. No. 15,974), JOANNE M. DENISON (Reg. No. 34,150), TIMOTHY M. KELLEY (Reg. No. 34,201), KENNETH D. WAHLIN (Reg. No. 34,944), BILLIE JEAN STRANDT (Reg. No. 36,940), THOMAS A. MILLER (Reg. No. 36,871), KEVIN P. MORAN (Reg. No. 37,193) and JEFFREY D. HUNT (Reg. No. 38,189), 100 East Wisconsin Avenue, Milwaukee, Wisconsin 53202-4108, Telephone (414) 271-6560, and each or any of them, my attorneys or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

ADDRESS ALL COMMUNICATIONS IN OR PERTAINING TO THIS APPLICATION TO:

David B. Smith

MICHAEL, BEST & FRIEDRICH

100 East Wisconsin Avenue

Milwaukee, WI 53202-4108

I hereby claim foreign priority benefits under Title 35, United States Code, \$119 of the foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application

Number Country Day/Month/Year Filed Claimed

8900557 Netherlands 7/03/89 Yes

STATEMENT OF INOPERATIVENESS OR INVALIDITY OF ORIGINAL PATENT 37 CFR 1.175

I believe the original patent to be partly invalid because of error without any deceptive intent on the part of the applicant. The error was discovered during a study of the Phillips patent. More specifically, our attorneys have informed me that U.S. Patent No. 3,659,899 to Phillips, filed March 12, 1970 and issued May 2, 1972 may affect the validity of one or more claims of the original patent. This error arose due to the fact that we were not aware of the Phillips patent when the original patent issued. This reissue application has amended original claims 1-11 to narrow their scope, as shown in underline and bracket in the reissue application. In addition, this reissue application has added new claims 12-24, including independent claims 13, 16, 20 and 22, each of which is narrower than original claim 1. The differences between the new independent claims and original claim 1 are as follows:

Claim 13 adds a base positioned under the planar member, and means for inflating the inflatable flexible body including a blower positioned under the base.

Claim 16 adds a base positioned under the planar member, wherein the inflatable flexible body has a periphery that is spaced inwardly from a periphery of the planar member.

Claim 20 adds a base positioned under the planar member, and means for detachably connecting a top portion of the inflatable flexible body to the planar member.

Claims 22-24 are the same as originally-allowed claims 9-11.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such

willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole inventor: Johannes H. Megens
Residence:
Citizenship:
Post Office Address:

Kelley Company, Inc. 6720 N. Teutonia Avenue Milwaukee, Wisconsin 53209

Lawrence F. Johnson

President



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Reissue Application of

Megens

U. S. Patent No. 5,042,103

Issued: August 27, 1991

Title: MOVABLE LOADING BRIDGE HAVING AN INFLATABLE FLEXIBLE BODY

ASSENT OF ASSIGNEE TO REISSUE UNDER 37 C.F.R. §1.172

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

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Pursuant to the provisions of 37 C.F.R. §1.172, the undersigned Assignee of the entire interest in U.S. Patent No. 5,042,103, hereby assents to the accompanying reissue application.

Respectfully submitted,

Kelley Company, Inc.

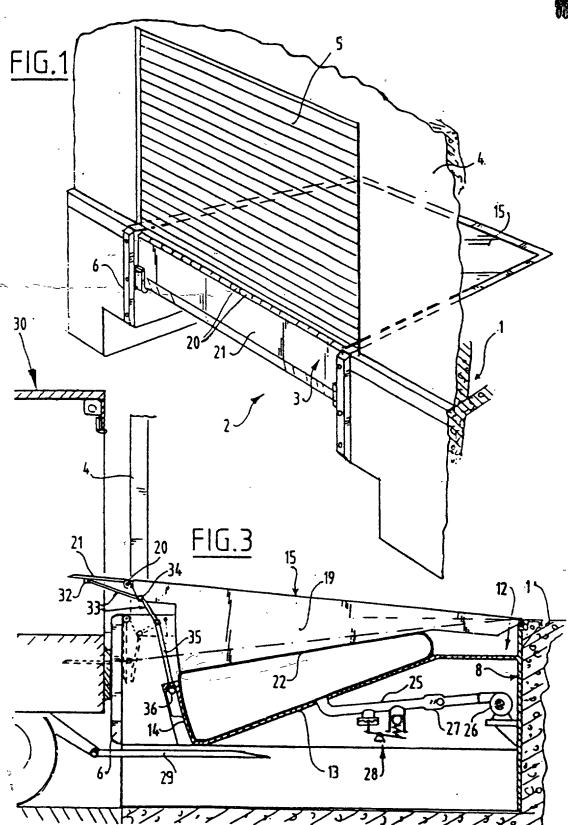
Date: 9/13/95

Lawrence E. Johnson

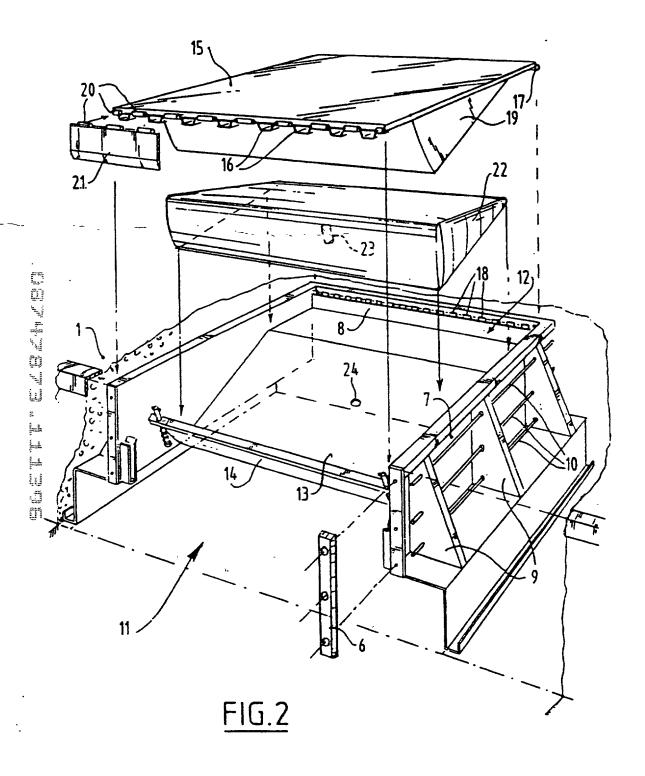
Title: President

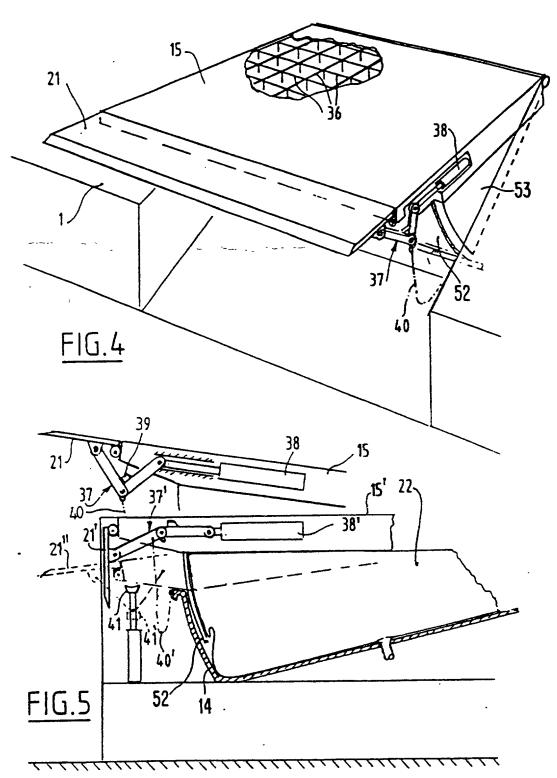
File No. 53142/9086

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Reissue Application Supplemental Declaration and Power of Attorney by Assignee

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Christopher L. Lawlor, Vice President —Administration of Kelley Company, Inc., declares: that I am a citizen of the United States and resident of Wisconsin; that the entire title to U.S. Patent Number 5,042,103, granted on August 27, 1991, to Johannes H. Megens is vested in Kelley Company, Inc.; that I believe said named inventor to be the original, first and sole inventor of the subject matter which is described and claimed in the aforesaid letters patent and in the foregoing specification and for which invention I solicit a reissue patent;

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.

I hereby appoint Kevin P. Moran (Reg. No. 37,193), Christopher B. Austin (Reg. No. 41,592), Robert E. Clemency (Reg. No. 19,287), David L. De Bruin (Reg. No. 35,489), Gerald L. Fellows (Reg. No. 36,133), Randall W. Fieldhack (Reg. No. 43,611), Joseph A. Gemignani (Reg. No. 19,482), Daniel S. Jones (Reg. No. 42,697), Richard L. Kaiser (Reg. No. 46,158), Timothy M. Kelley (Reg. No. 34,201), Casimir F. Laska (Reg. No. 30,862), Edward R. Lawson, Jr. (Reg. No. 41,931), Richard H. Marschall (Reg. No. 39,290), Thomas A. Miller (Reg. No. 36,871), Andrew R. Peret (Reg. No. 41,246), David R. Price (Reg. No. 31,557), Thomas S. Reynolds II (Reg. No. 45,262), David B. Smith (Reg. No. 27,595), Derek C. Stettner (Reg. No. 37,945), Bithle Jean Strandt (Reg. No. 36,940), Sheldon L. Wolfe (Reg. No. 43,996), Paul F. Donovan (Reg. No. 39,962), Jill A. Fahrlander (Reg. No. 42,518), Grady J. Frenchick (Reg. No. 29,018), Karen B. King (Reg. No. 41,898), Linda Blair Meier (Reg. No. 39,769), Teresa J. Welch (Reg. No. 33,049), Robert S. Beiser (Reg. No. 28,687), Witold A. Ziarno (Reg. No. 39,888), and each or any of them, my attorneys or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

ADDRESS ALL COMMUNICATIONS IN OR PERTAINING TO THIS APPLICATION TO:

David B. Smith
MICHAEL, BEST & FRIEDRICH LLP
100 East Wisconsin Avenue
Milwaukee, WI 53202-4108

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of the foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application

Priority Day/Month/Year Filed Claimed Number Country Yes 8900557 Netherlands 7/03/89

STATEMENT OF NO DECEPTIVE INTENTION 37 CFR 1.175

I believe that all errors being corrected in the reissue application up to the time of this declaration arose without any deceptive intention on the part of the applicant

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole inventor: Johannes H. Megens

Residence:

Terborg, Netherlands

Citizenship:

Dutch

Post Office Address: Stationsweg 3

NL-7061 CT Terborg, Netherlands

Upon my information and belief, this residence, citizenship, and address information is based on the last available information known to the assignee.

> Kelley Company, Inc. 6720 N. Teutonia Avenue Milwaukee, Wisconsin 53209

Christopher L. Lawlor

Vice President -Administration

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